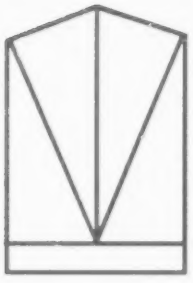
Shipbuilders
Council of
America

1988 IN REVIEW



SHIP CONSTRUCTION REPORT

This publication is the first of a series of quarterly statistical reports to be issued by the Shipbuilders Council of America, which will analyze the following issues on an annual basis. The schedule set for these reports is as follows:

March:	Ship Construction
June:	Ship Repair
September:	Manpower and Labor issues
December:	Contracts/Financial

Shipbuilders Council of America
1110 Vermont Avenue, NW
Washington, DC 20005-3553

202-775-9060

OVERVIEW

On the surface, the 1988 Report on New Ship Construction would leave the reader with the feeling that many things improved for U.S. shipyards during the course of the past year. The Navy contracted for 32 ships in 1988 which increased the backlog to $16.6 billion. This compares favorably to the backlog of $9.0 billion at the end of 1987. Thus, it would be fair to say that U.S. shipbuilders should be feeling renewed vigor as a result of the increase in backlog.

The answer to that query is yes and no. Obviously, the placing of 32 new naval orders is impressive but those contract awards reflect the release of many prior year programs and the successful awarding of many FY 1989 contracts in the first quarter of the fiscal year (October-December 1988). In fact, only 16 of the 32 vessels awarded were FY 1989 ships. The remaining 16 were composed of 13 ships awarded in early 1988 from the FY 1988 program and 3 ships delayed into 1988 from the FY 1987 program. It can be expected that 1989 will not equal the 1988 experience.

Severe market structure problems remain. Only 16 shipyards continue to perform work for the Navy. Of that total, five yards will complete current work by the end of 1989. By the end of 1989, we will have only 11 yards with new construction contracts. In 1979, there were 25 yards building ships for the Navy and commercial customers. The great irony of the Reagan naval buildup is that the level of market concentration increased sharply in a time period when the rebuilding of the Navy was at the centerpiece of the defense buildup. This clearly supports the conventional view that the Navy programs alone could not sustain the broader industry.

Obviously with no commercial work in place, all 16 yards are effectively held hostage to the budget process. Reductions to the Navy's shipbuilding budget, in the absence of a commercial market, will have a devastating impact on the industry.

As a way of protecting itself from shifts in the potential fortunes of the defense budget, the industry is attempting to restructure a commercial market in the United States. This report documents trends in international commercial shipbuilding that indicates it is Japan that will remain the dominant commercial shipbuilder despite the challenge from South Korea. This challenges the view of many that commercial shipbuilding "chases cheap labor" given the strength of the yen in international currency markets. By contrast, despite "cheaper" labor the Korean situation will remain in flux as long as labor strife continues. The uncertainties associated with that unrest will have a grave impact on Korea's continuing ability to maintain market share. Meanwhile, the Europeans will continue their direct subsidy programs as a way of competing with the Asian yards.

Yet, the international situation is marked by the apparent stabilization of capacity as the world's shipbuilders are poised to take advantage of an increase in demand. The report identifies coming increases in new orders that suggest a doubling of current workload is within the realm of possibility by the year 2000.

What are the prospects for the U.S.? In the absence of any government support, U.S. shipyards cannot expect to take advantage of any potential increase in world demand in the face of foreign government interference in the marketplace. Given the expected downturn in new naval orders, it would seem to make sense for the United States to develop an industrial strategy to support the export potential for U.S. shipyards - in terms of both the near-term market in military ship construction and the long-term effort in the commercial arena. Stronger impetus in the military export arena can come from the coordinated support of both the State and Defense Departments in working with the industry to develop a response to allied needs. The government-industry partnership in military ship exports should be a partnership that can be achieved in the short run.

But, a more fundamental long-term strategy is one that establishes a commercial shipbuilding capability in the United States. Such an effort would have four elements: 1) Government commitments to negotiate rollbacks to foreign shipyard subsidies, whether direct or indirect; 2) A commitment on the part of labor-government-management to improve productivity in the shipyards; 3) Revitalization of commercial maritime research and development in new ship design and ship production process improvement; and 4) Development of a comprehensive Defense sealift program which can be used to amortize the investment made in America's shipyards.

These steps will allow for the full development of a commercial sector in U.S. shipyards. The world market share required to maintain current capacity would be no more than 2-3 percent. Certainly this market share is achievable. Not to seize the initiative would doom the country to a weakened national defense and, potentially, to economic blackmail.

John J. Stocker
President

NAVY SHIPBUILDING

1989 SCN Budget

For the second year in a row the Congress, in acting on the FY 1989 budget, added ships to the President's request for the Shipbuilding and Conversion, Navy budget and bought out the final ships of a long running series.

As submitted, the President's budget requested $9,130.1 million for the construction of seventeen ships and conversion of two others. This total included one Trident submarine, two SSN-688s, the lead ship of the new SSN-21 SEAWOLF class, three follow-on DDG-51s, the fourth ship of the LHD-1 class, the first follow-on ships of the MHC-51 Osprey class, the second AOE-6 ship, two TAO-187 Fleet Oilers, three TAGOS-19 SWATH ships and one TAGS SWATH oceanographic research ship. Two AO Jumbo conversions completed the request.

The request moved easily and non-controversially through the authorization process with the only casualty; the TAGS SWATH oceanographic ship. The Navy stated that the TAGS was being delayed due to incomplete design work. With that one exception, the House Armed Services Committee approved the request as submitted. Floor action on the House Authorization Bill was minimal. Ten Island class patrol boats worth a total of $70.0 million were authorized in the Bill but died in the House Senate Authorization Conference

The Senate Armed Services Committee also approved the President's request as submitted with the exception of the TAGS SWATH. However, during Senate floor action on the Bill, Senator William Cohen (R-ME) offered an amendment which authorized a fourth DDG-51 class guided missile destroyer provided the Navy could find the funds to pay for it. This amendment passed and the bill proceeded to Conference. The authorization conferees agreed that a fourth DDG-51 was desirable and authorized the Navy to build a fourth ship in FY 1989 and to fund it with $730 million in funds to be transferred forward from FY 1988 and prior years.

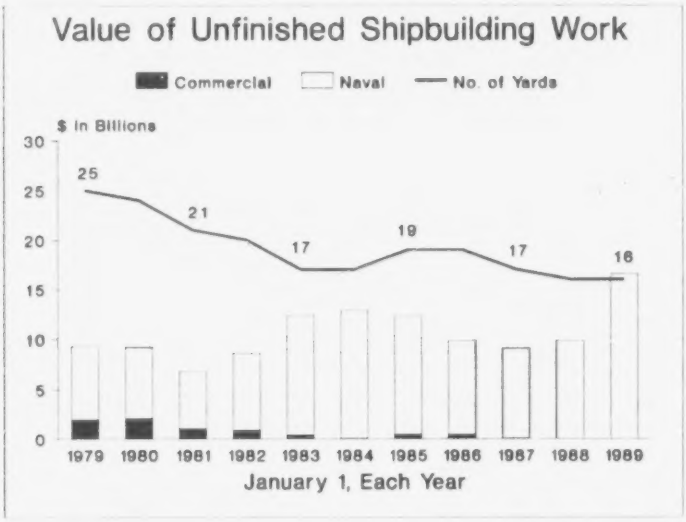
The House and Senate completed their action on the entire FY 1989 Defense Authorization Act and sent it to the President for signature on July 14, 1988 prior to adjournment for the Democratic National Convention in Atlanta. Unfortunately, on August 3, 1988 then-President Reagan vetoed the Defense Act on the grounds that the arms control provisions of the bill were too restrictive and because the Congress cut $800 million from his $4.8 billion request for the Strategic Defense Initiative (SDI).

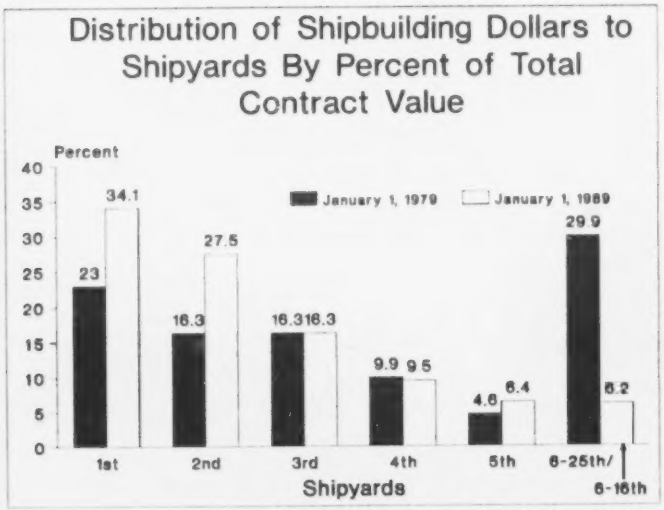
Historically, the Defense Appropriation Committee takes the authorization mark as their guide and tend to cut programs below the authorized level. This year they did levy fiscal reductions against the Trident submarine of $107.0 million and the SSN-688 and DDG-51 programs by reducing advance procurement funding. However, the House Appropriations Committee added three TAO-187 Fleet Oilers for an additional $405.0 million, six Landing Craft Air Cushion (LCAC) for an additional $114.0 million as well as adding over $100 million in advance procurement to the Carrier Service Life Extension Program. The Senate increased the TAO-187s to four and agreed with the House position on LCAC which now totalled 15. In addition the Senate proposed a method of funding two additional DDG-51s using transfer of prior year funding. The net result was an Appropriation Act for the Navy's shipbuilding account of $9,055.5 million which included nineteen new construction ships and two conversions. The fourth and

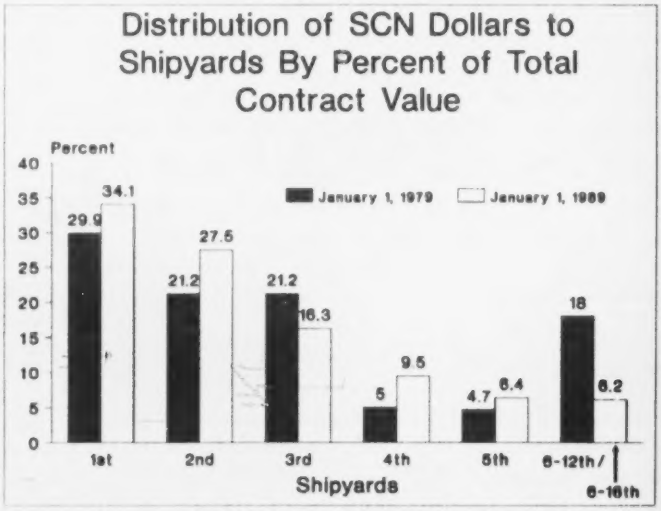
fifth DDG-51s were funded through General Provisions for an additional $1,376.0 million. Since these ships were financed with prior year funds, they are not reflected in the FY 1989 Appropriation. Final appropriation data is shown below: ($ in Millions)

Program	Ship/	Funding	Program	Ship/	Funding	Program	Ship/	Funding
TRIDENT	1/	$ 1,261.1	AOE-6	1/	$ 363.9	CV SLEP(AP)	-/	$ 62.7
SSN-688	2/	$ 1,365.1	MHC-1	2/	$ 197.2	AO Jumbo	2/	$ 84.9
SSN-21	1/	$ 1,488.0	TAO-187	5/	$ 689.2	Outfitting	-/	$ 174.7
DDG-51	3/	$ 2,062.2	TAGOS-19	3/	$ 159.6	Post Delivery	-/	$ 102.1
LHD-1	1/	$ 737.5	LCAC	(15)/	$ 306.6	Total New Ships	19/	$ 9,055.5

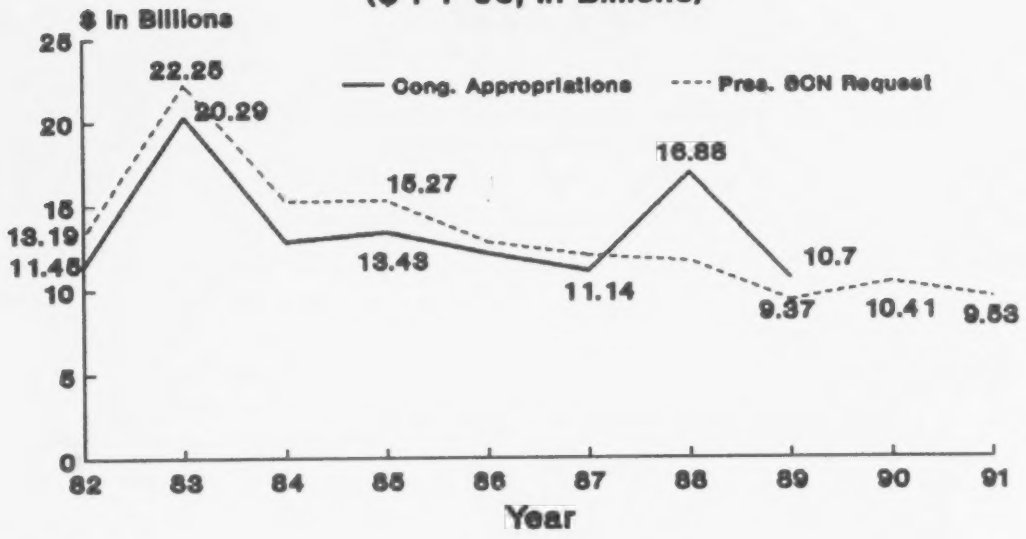
Based on prior year appropriations and FY 1989 awards as of January 1, the industry's Navy and Commercial backlog is shown in the following charts.







Funding for Navy Shipbuilding
Budget Request Versus Appropriation
FY 1982 - FY 1991
($ FY 90, In Billions)

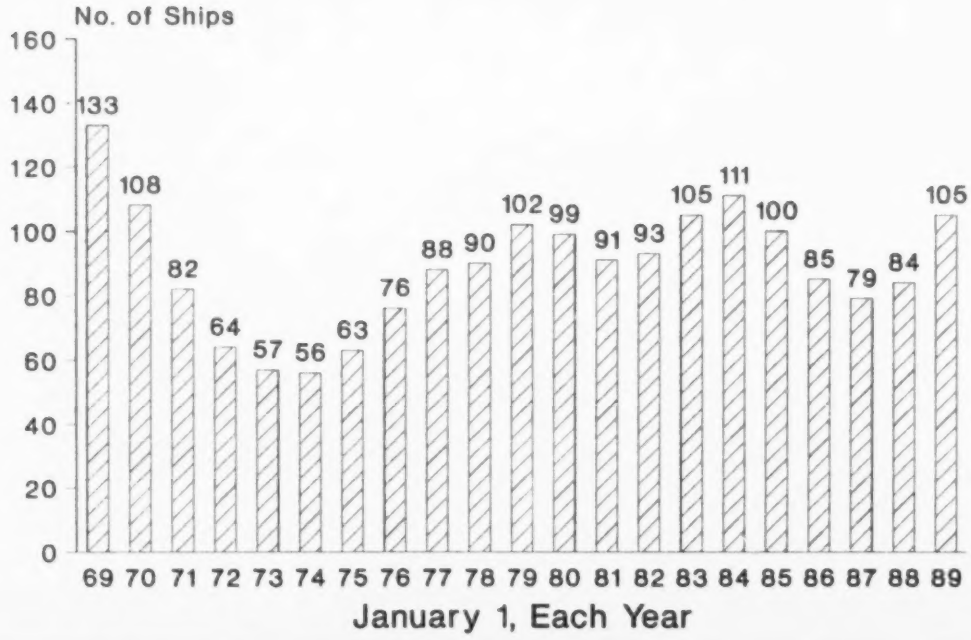


New Naval Combatant and Auxiliary Vessel Orders Placed with U.S. Private Shipyards (1,000 Light Displacement Tons and Over)

Calendar Year	Total Vessels	Combatant	Auxiliary	Contract Yards	Light Disp. Tons	Initial Shipyard Contract $ Value
1968	15	10	5	4	152,591	638,239,000
1969	6	6	0	3	79,533	453,180,000
1970	6	6	0	2	132,000	758,100,000
1971	15	15	0	3	88,044	1,055,000,000
1972	14	13	1	4	85,522	852,204,000
1973	7	7	0	2	38,727	512,345,000
1974	16	14	2	4	171,100	1,387,375,000
1975	16	13	3	6	106,197	1,677,241,000
1976	20	14	6	8	91,322	1,254,169,000
1977	15	12	3	8	88,616	1,575,271,000
1978	25	20	5	8	119,478	2,506,400,000
1979	13	11	2	6	60,646	1,356,753,000
1980	11	8	3	6	101,072	1,933,655,000
1981	28	13	15	10	97,307	2,842,301,000
1982	28	18	10	11	321,040	7,777,200,000
1983	27	12	15	10	431,760	5,041,400,000
1984	11	11	0	6	104,157	2,848,800,000
1985	11	4	7	7	92,320	1,679,400,000
1986	16	12	4	9	117,816	3,034,868,000
1987	20	12	8	10	127,310	3,521,899,000
1988	32	21	11	8	408,322	9,885,700,000

New Naval Vessel Orders Placed with U.S. Private Shipyards Each Year

New Naval Vessels Under Construction or On Order at U.S. Private Shipyards



Naval Vessels Under Construction/Conversion or On Order In U.S. Private Shipyards (1,000 Light Displacement Tons and Over)

	Jan. 1985		Jan. 1986		Jan. 1987		Jan. 1988		Jan. 1989	
	No.	LDT	No.	LDT	No.	LDT	No.	LDT	No.	LDT
NEW CONSTRUCTION										
TRIDENT	6	75,000	5	62,500	5	62,500	6	75,000	7	87,500
SSN-688	18	108,000	15	90,000	17	102,000	19	114,000	22	132,000
CVN	3	213,000	3	213,000	2	142,000	2	142,000	4	284,000
CG	14	124,740	12	106,920	13	115,830	13	115,830	15	133,650
DDG-51	-	-	1	8,300	1	8,300	3	24,900	8	66,400
FFG	10	27,270	5	13,635	3	8,181	1	2,727	1	2,727
LHD	1	28,500	1	28,500	2	57,000	3	85,500	4	114,000
LSD	6	66,600	7	77,700	6	66,600	5	55,500	5	55,500
LSD (CV)	-	-	-	-	-	-	-	-	1	11,894
AGOR	-	-	-	-	-	-	-	-	1	2,100
AOE	-	-	-	-	-	-	1	19,700	2	39,400
ARDM	1	5,300	1	5,300	-	-	-	-	-	-
ARS	4	10,900	2	5,450	-	-	-	-	-	-
MCM	5	5,000	5	5,000	8	8,000	7	7,000	7	7,000
MHC	-	-	-	-	-	-	1	780	1	780
T-5	5	45,000	2	18,000	-	-	-	-	-	-
T-AGOS (Monohull)	9	14,400	7	11,200	4	6,400	8	12,800	6	9,600
T-AGOS (SWATH)	-	-	-	-	1	2,486	1	2,486	4	9,944
T-AGS	-	-	2	17,620	2	17,620	2	17,620	4	35,240
T-AKX	5	113,500	2	45,400	-	-	-	-	-	-
T-AO	4	38,000	7	66,500	8	76,000	7	66,500	10	95,000
WMEC	9	10,800	8	9,600	7	8,400	5	6,000	3	3,600
Totals	100	886,010	85	784,625	79	681,317	84	748,343	105	1,090,335
CONVERSIONS										
AO Jumbo	-	-	-	-	-	-	-	-	4	46,430
BB	-	-	-	-	1	46,000	1	46,000	-	-
T-ACS	1	15,060	1	15,060	3	45,180	4	63,320	2	33,200
T-AG	-	-	-	-	-	-	1	4,037	1	4,037
T-AH	2	140,000	2	140,000	2	140,000	1	70,000	-	-
T-AKR	4	223,200	1	55,800	-	-	-	-	-	-
T-AKX	4	110,591	-	-	-	-	-	-	-	-
T-AVB	1	14,000	2	28,000	1	14,000	-	-	-	-
Totals	12	502,851	6	238,860	7	245,180	7	183,357	7	83,667

Naval Vessel Orders Placed with U.S. Private Shipyards January 1, 1989 - April 1, 1989

	No.	LDT
NEW CONSTRUCTION		
SSN-21	1	9,100
MCM	3	3,000
MHC	1	780
TAO	3	9,500
CONVERSIONS		
T-ACS	2	33,000

Shipbuilding and Conversion, Navy (SCN)
Five Year Plan
FY 1990 - FY 1994
($ in Millions)

PROGRAMS	FY 90	FY 91	FY 92*	FY 93*	FY 94*
NEW CONSTRUCTION					
TRIDENT	1/ $ 1,228.6	1/ $ 1,254.5	1/ $ 1,260.0	1/ $ 1,270.0	1/ $ 1,280.0
SSN-688	2/ $ 1,520.3	-	-	-	-
SSN-21	$ 866.0	2/ $ 3,161.9	3/ $ 4,500.0	3/ $ 4,400.0	3/ $ 4,300.0
CVN	-	-	-	-	$ 250.0
DDG-51	5/ $ 3,600.7	5/ $ 3,604.7	5/ $ 3,600.0	5/ $ 3,600.0	5/ $ 3,600.0
LHD-1	-	$ 35.8	1/ $ 1,100.0	1/ $ 1,100.0	-
LSD(CV)	1/ $ 229.3	1/ $ 232.7	1/ $ 235.0	1/ $ 240.0	1/ $ 245.0
AE	-	-	-	1/ $ 325.0	2/ $ 575.0
AOE	1/ $ 356.4	1/ $ 357.7	1/ $ 400.0	1/ $ 400.0	1/ $ 400.0
AR	-	-	-	-	1/ $ 400.0
ARS	-	-	-	-	1/ $ 80.0
MCM	3/ $ 341.5	-	-	-	-
MHC	3/ $ 230.3	3/ $ 214.9	4/ $ 280.0	4/ $ 280.0	-
AGOR	3/ $ 278.1	1/ $ 41.9	2/ $ 100.0	2/ $ 110.0	1/ $ 90.0
TAGOS(SWATH)	1/ $ 155.8	-	2/ $ 280.0	1/ $ 140.0	2/ $ 280.0
AGOS	-	-	1/ $ 150.0	-	2/ $ 300.0
Subtotal	$ 8.807.0	$ 8,904.1	$11,905.0	$11,865.0	$11,800.0
CONVERSIONS/SLEPS					
CV SLEP	1/ $ 651.2	$ 76.6	$ 100.0	1/ $ 675.0	-
AO(Jumbo)	1/ $ 35.7	-	-	-	-
Moored Training Ship	1/ $ 220.0	-	1/ $ 225.0	-	
Subtotal	$ 906.9	$ 76.6	$ 325.0	$ 675.0	0
OTHER					
LCAC	(9)/$ 219.3	(12)/$ 284.0	(12)/$ 288.0	(12)/$ 290.0	(12)/$ 290.0
Service Craft	$ 45.1	$ 78.6	$ 50.0	$ 60.0	$ 70.0
Landing Craft	$ 11.3	$ 10.0	$ 15.0	$ 35.0	$ 115.0
Outfitting	$ 260.5	$ 220.0	$ 250.0	$ 250.0	$ 250.0
Post Delivery Support	$ 159.5	$ 156.9	$ 160.0	$ 160.0	$ 160.0
Ship Special Equipment	$ 10.0	$ 35.2	-	-	-
Subtotal	$ 705.7	$ 784.7	$ 763.0	$ 795.0	$ 885.0
Grand Total	$ 10,419.6	$ 9,765.4	$12,993.0	$13,335.0	$12,685.0
New Construction	20	14	21	20	20
SLEP/Conversions	3	0	1	1	0

* Cost Projections are by SCA staff. DoD figures not yet released.

The Next Five Years
Shipbuilding and Conversion in the 1990's

In the submission to the Congress of the Fiscal Year 1990-1994 shipbuilding /conversion budget, the Department of Defense provided the number of ships in each class which they required over the next five years but supplied funding figures for only fiscal years 1990 and 1991. The fully configured five year plan on the previous page includes funding projections by the Council staff for Fiscal Years 1992-1994. At this time, we understand that the Navy may not disclose their funding requirements for those years until the FY 1991 budget is submitted early next year.

The Department of Defense plan presents a request for ninety five new construction ships and five conversions over the five year period. In addition, fifty seven Landing Craft Air Cushion (LCAC) and an unspecified number of service and landing craft will be purchased. The request for an average of nineteen new construction ships per year is marginally higher than the ten year appropriated average of seventeen ships. Over a thirty year period, nineteen ships purchased every year would sustain a Navy of 570 ships, so unless we experience massive extensions of ships past the nominal 30 year period, the Navy will never achieve its 600 ship goal.

Remembering that the dollar amounts in Fiscal Years 1992-1994 are SCA projections based on DoD ship requirements, the entire five year plan is priced out at $59,198.0 Billion or an average of slightly over $11.83 billion a year. This is very close to the appropriation required to sustain the Navy at or near 600 ships. However, the FY 1990 and FY 1991 funding totals are both well short of the average. Given a no "real growth" budget future, the ship procurement goals of 1992-1994 may never be met.

Of the $59,198.0 million which we project for the five year plan, $53,281.0 million representing 90.0 percent of the total is destined for new construction, 3.35 percent for conversion and 6.65 percent for "other" programs. Within the new construction category, ships and dollars are split by type as follows:

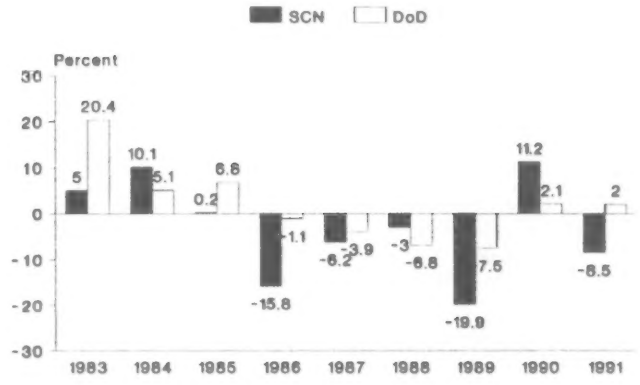
Type	Number of Ships	Percent of ships	Projected Funding $M	Percent of New Construction Funding
Submarines	18	18.9	$ 25,041.3	47.0
Aircraft Carriers	0	0	$ 250.0	0.01
Surface Combatants	25	26.3	$ 18,005.4	33.9
Mine Countermeasures	17	17.9	$ 1,346.7	2.6
Amphibious	7	7.4	$ 3,417.8	6.5
Auxiliaries (Logistics)	8	8.4	$ 2,814.1	5.4
Auxiliaries (Support Ships)	20	21.1	$ 2,405.8	4.6
Totals	95	100.0%	$ 53,281.1	100.0 %

Of the total of $53,281.1 million projected over five years, programs now held by the six largest navy builders account for $48,628.6 million in total program dollars representing 91.3 percent of the total. This is a strong indication that the future Navy Program, as has been the case in the past, can not support current shipyard capacity. We see no relief in this plan particularly for the second tier yards which are facing closure. If immediate help is not forthcoming in the form of

government sealift ships or new commercial building, four of the five most capable second tier yards in the country will almost certainly be closed or reduced to repair yard status by the end of calendar year 1989 and we will be left with a maximum of six major yards, fully committed to Navy work, with which to face any mobilization requirement.

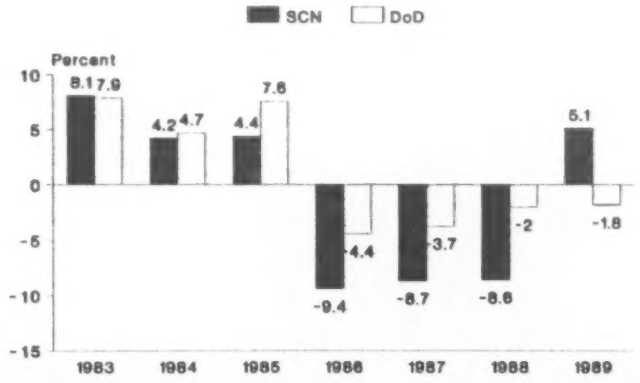
What are the chances that the funding levels projected for Fiscal Years 1992-1994 will be achieved? Based on recent trends and the uncertainties facing Defense funding as the Bush Administration grapples with budget deficits, the prospects are not good! The chart at the top of page 4 clearly shows the declining value of the SCN appropriation over the past eight years. The charts below demonstrate year to year changes in real growth for the DoD budget request compared to real growth change in the Navy SCN request. The bottom chart compares real growth change in DoD total appropriations to SCN appropriations. In almost every year, the rate of change has been less favorable for SCN compared to the entire DoD budget. This demonstrates the error of those who believe that Navy Shipbuilding has been over funded during the past eight years.

DoD Request vs SCN Request*
Percent of Real Growth by Year



* Note: Data in both charts normalized to account for sharp fluctuations of CVN funding in FY 1983 and FY 1988.

DoD Appropriation vs SCN Appropriation
Percent of Real Growth by Year*



COMMERCIAL SHIPBUILDING

The Decline of World Shipbuilding

The 1960s and early 1970s were relatively prosperous years for shipyards. Orders for new cargo ship--particularly oil tankers--were placed in record numbers during the 1960s and into the 1970s, and shipyards worldwide geared up to fill the orders. During a ten-year span, Europe increased its shipbuilding capacity by 136 percent and Japan by a whopping 650 percent.

This "golden age of shipbuilding" was not long-lived, however. The oil crisis of the mid-1970s plunged the world-wide shipbuilding industry into a serious decline. The immediate effect was the discontinuation of orders for oil tankers, which had contributed to more than 50% of new ship orders. The dramatic increase in oil prices led to significant reduced growth in seaborne trade, and hence to the laying up of ships.

As a result, shipyards with too much capacity found themselves competing for too few contracts. The entry into this market of new, government-supported yards employing cheap labor exacerbated the situation. Governments in traditional shipbuilding countries, attempting to rescue domestic yards and preserve domestic shipbuilding capability, adopted various subsidy policies with limited success. The countries that fared best were those whose governments faced the harsh reality of the need to reduce capacity and provided both guidance and financial aid for shipyard rationalization as well as for ship construction.

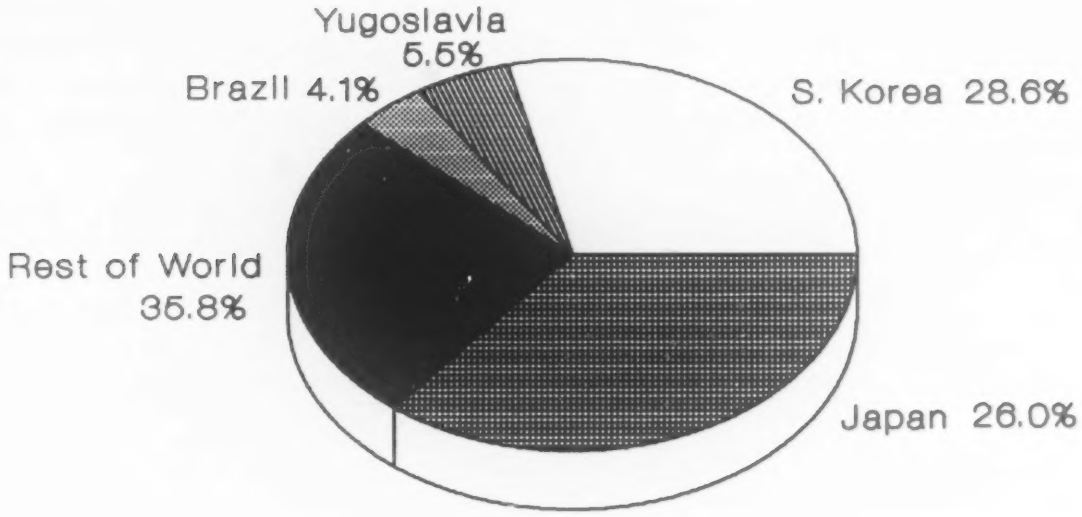
The table below shows the decline in global orders since 1968, as well as the geographical shifts where orders were placed. Note especially the dramatic shift to South Korean yards from .4 percent of the total tonnage as of Jan. 1, 1968 to 28.6 percent as of Jan. 1, 1989. Note also the emergence of China as a shipbuilding center, placing sixth in the top- ten for DWT and third for number of ships on order as of Jan. 1, 1989. On the following page, the "pie" charts illustrate the percentages of world orders in DWT for the top-four countries as of Jan. 1, 1989, compared to Jan. 1, 1978. In addition, note that the U.S. had seven percent of the market 11 years ago.

Twenty One Year Comparison of the Top-Ten Orderbooks In Deadweight Tonnage

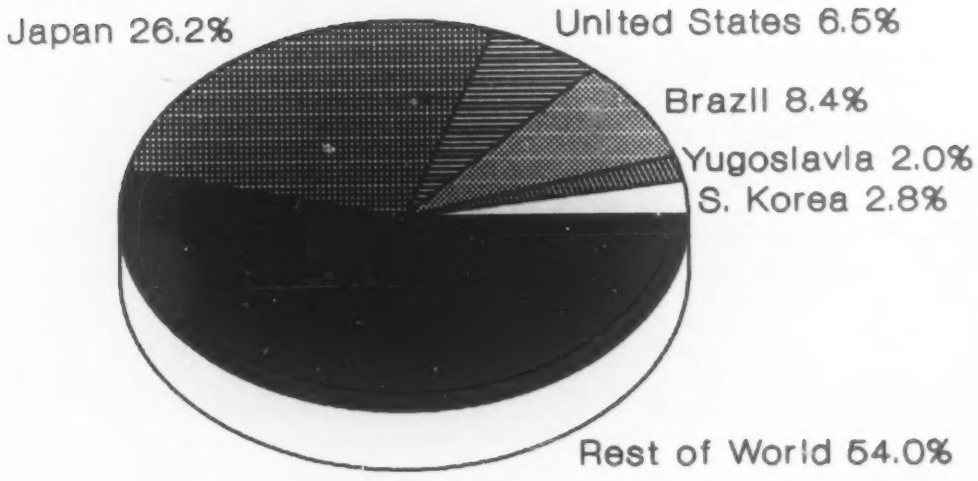
	Jan. 1, 1989				Jan. 1, 1978				Jan. 1, 1968			
Country	No. of Ships	% of World	DWT	% of World	No. of Ships	% of World	DWT	% of World	No. of Ships	% of World	DWT	% of World
S. Korea	115	11.4	10,781,914	28.6	82	4.2	1,502,714	2.8	5	.2	281,000	.4
Japan	212	21.0	9,981,179	26.0	499	26.0	14,018,822	26.2	472	25.6	24,941,010	40.8
Yugoslavia	47	4.7	2,072,800	5.5	43	2.2	1,117,994	2.1	53	2.8	1,284,900	2.1
Brazil	35	3.5	1,543,325	4.1	128	6.6	4,498,240	8.4	44	2.4	434,250	.7
Spain	48	4.8	1,455,340	3.9	123	6.4	3,510,974	6.5	83	4.5	1,744,210	2.8
China	66	6.6	1,393,326	3.7	-	-	-	-	-	-	-	-
Poland	46	4.6	1,119,140	3.0	97	5.1	2,076,345	3.9	108	5.9	1,312,990	2.2
Denmark	43	4.3	1,089,598	3.0	48	2.5	904,435	1.6	34	1.8	2,258,040	3.7
Italy	33	3.3	909,598	2.0	56	2.9	1,880,232	3.5	52	2.8	2,040,760	3.3
W. Germany	46	4.6	775,982	2.1	96	5.0	1,444,350	2.7	126	6.9	4,538,240	7.4
U.S.	**0**	**0**	**0**	**0**	**60**	**3.1**	**3,467,000**	**6.5**	**64**	**3.4**	**1,221,000**	**2.0**
World	1,005		37,669,999		1,918		53,493,593		1,837		61,000,500	

World Percentage Comparisons of Commercial Vessel Tonnage on Order

Jan. 1, 1989



Jan. 1, 1978



The Decline of U.S. Commercial Shipbuilding

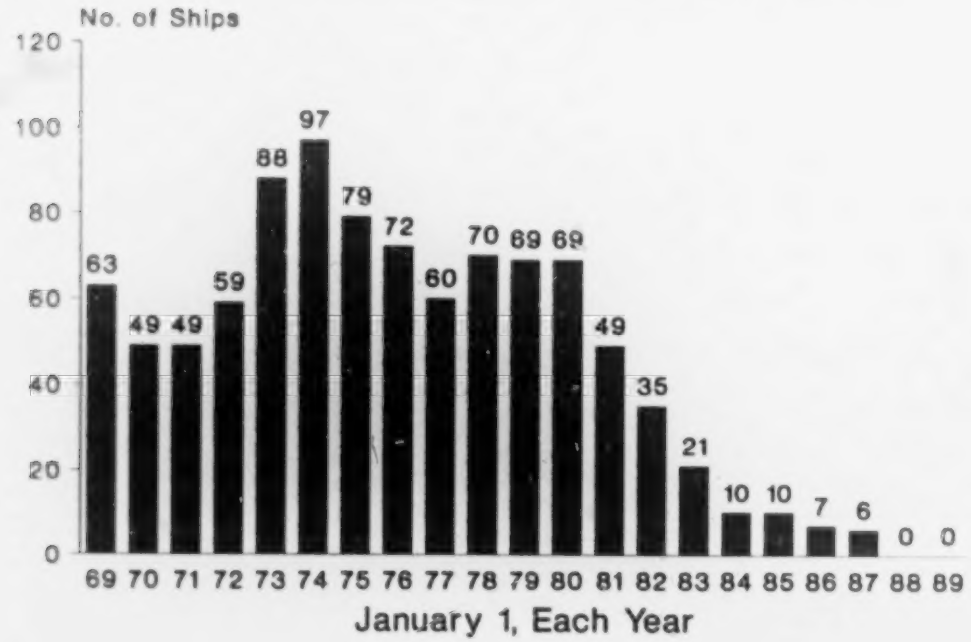
As of Jan. 1, 1978, U.S. shipbuilders had nearly seven percent of the world's orderbook for commercial tonnage. Ten years later, that percentage had been reduced to zero. What happened?

In 1981, when the governments of shipbuilding nations in Europe and the Far East were providing direct and indirect shipbuilding subsidies ranging from ten to over sixty percent, the government of the United States moved to discontinue funding of all government assistance programs to its domestic shipyards. Furthermore, U.S.-flag merchant ship owners were encouraged to buy foreign through special legislation temporarily exempting them from the law which says that U.S.-flag ships must be built in U.S. shipyards.

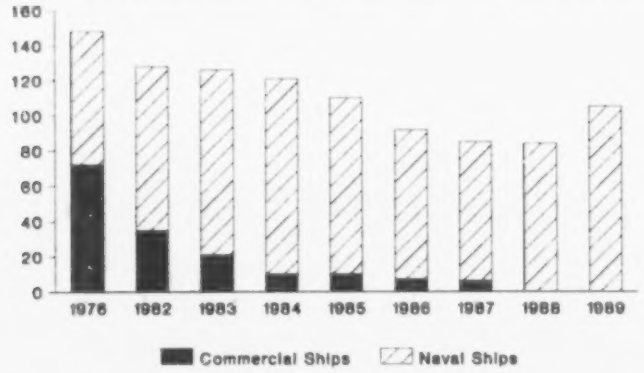
Reeling from this double blow and forced to compete as an unsubsidized industry against subsidized competitors in the international market, the U.S. commercial shipbuilding industry collapsed. The last order for a commercial ship placed with a U.S. yard was in 1984. In November of 1987, Bay Shipbuilding Corporation of Sturgeon Bay, Wisconsin, delivered the last commercial ship built in the U.S. to Sea-Land Services of Iselin, New Jersey-- a 1,400 TEU containership named the KODIAK.

Today, nearly 95 percent of the workload in American shipyards is U.S. government ships, principally Navy ships. The bar chart below tracks commercial ships under construction or on order at U.S. yards for a 20-year period. The bar chart on the following page shows the proportion of commercial to naval ships in the orderbook since Jan. 1, 1976.

New Merchant Vessels Under Construction Or On Order at U.S. Private Shipyards



Commercial and Naval Ships on Order



The Current International Market

1988 brought new hope to international shipbuilding, as the shipping market improved overall, particularly for bulk carriers and product tankers. In general, however, the rise in freight rates resulted in increased activity for second-hand ships rather than in orders for new ships. However, the ability to acquire second-hand ships is finite and inventory replacement demand will increase in the near term. In fact, there were fewer new ships on the world orderbook at the end of 1988 than at the end of 1987.

Vessel Types on Order by Country of Build as of January 1, 1989

Country	Dry Cargo	Container	Tanker	Bulker	Ro-Ro	Export Ships*	Total Ships**	Total DWT
Japan	52	16	81	59	4	(139)	212	9,981,179
S. Korea	10	13	55	35	2	(91)	115	10,781,914
China	42	4	11	7	2	(52)	66	1,393,326
Spain	26	-	22	-	-	(40)	48	1,455,340
Yugoslavia	12	1	28	4	2	(47)	47	2,072,800
Poland	28	2	9	5	2	(28)	46	1,119,140
W. Germany	12	16	12	-	6	(21)	46	775,982
Denmark	17	16	10	-	-	(7)	43	1,089,598
Bulgaria	4	1	31	5	-	(36)	41	519,298
Netherlands	23	1	12	-	3	(7)	39	193,908
Brazil	-	2	21	9	3	(7)	35	1,543,325
Italy	7	8	12	3	3	(1)	33	909,598
E. Germany	10	8	-	-	10	(20)	28	385,060
Turkey	19	-	-	5	-	(15)	24	334,625
USSR	3	-	8	1	6	(5)	18	539,650
Finland	7	-	10	-	-	(17)	17	64,800
Norway	10	-	1	-	4	(14)	15	77,100
U.K.	5	2	6	-	-	(4)	13	195,800
Portugal	12	-	1	-	-	(7)	13	124,677
(56% of nations w/orders)							(89%)	(89%)
United States	-	-	-	-	-	0	0	0
Total World	329	94	368	163	51		1,005	37,669,999

(Source: Fairplay Information System 1989)

* Export Ships: Figures are estimates, based on the countries of flag of the ships on order at individual yard

** Total Ships: Excludes passenger/vehicle/cruise vessels, miscellaneous vessels, and offshore vessels.

Prices for newbuildings rose in 1988. For example, a very large crude carrier (VLCC) built in the Far East cost $60 million to $70 million--substantially more than South Korea's rock bottom prices of $38 million to $40 million in 1986. Through concerted shipyard rationalization efforts in Japan and in member- nations of the European Community, world shipbuilding overcapacity continued to be reduced substantially.

Market Trends and Predictions

Studies performed in 1988 reached the same general conclusion: the decline in overall shipbuilding production is over for the foreseeable future. They also agreed that ageing merchant ships currently in the world fleet cannot last forever. The crystal ball comes into play in predicting when they will be replaced and how many will be required.

Two major forecasts performed were those of the Association of West German Shipbuilders (AWES) and the Government of Japan's Ministry of Transport (MOT). Both predicted that a major increase in newbuilding demand will occur by the mid 1990's. The studies are not far apart in their estimates of total commercial tonnage required during the next decade. AWES predicts a newbuilding demand of 20.4 M dwt by the end of 1990, with that increment rising sharply with 155.3 M dwt in new orders in the 1990-1995 period, and the 1995-2000 period seeing orders of 192.1 M dwt. This demand is driven largely by inventory replacement since the fleet is predicted to expand by only six percent by the year 2000. The Japanese Government forecasts closely parallel the AWES data.

Thus, in the period 1987-2000, the average annual newbuilding demand is predicted to be 28.3 M dwt by AWES and 34.9 M dwt by the Japanese. This demand is measured against current (1987) world output of 15.5 M dwt.

AWES/MOT Comparative Predictions for World Tonnage (In Millions of DWT)

Vessel Type	Tonnage Cat.	Exist. Fleet: 1987 AWES	1988 MOT	1990 AWES	1990 MOT	1995 AWES	1995 MOT	2000 AWES	2000 MOT
Tankers -	Existing	253.8	245.9						
	Required			204.7	N/A	223.0	219.4	250.4	220.1
	*New					71.8	69.1	88.0	74.7
Bulkers -	Existing	210.6	209.9						
	Required			206.3	N/A	230.7	220.6	259.7	250.1
	*New			13.5		63.0	52.5	78.0	70.2
Other Cargo -	Existing								
	Required	132.4	132.6	124.5	N/A	121.3	134.6	119.3	147.0
	*New (Incl. Containerships)			6.4		16.0	40.2	20.3	39.3
Gas/Chem. -	Existing								
	Required	15.5	6.5	15.1	N/A	17.1	7.4	20.0	8.1
	*New			.5		4.5	1.8	5.8	1.4
Total -	Existing								
	Required	612.3	594.9	550.6	N/A	592.1	582.0	649.4	625.3
	*New			20.4		155.3	163.6	192.1	185.6

* Newbuilding demand is created by estimating scrappage rate added to inventory adjustments to meet requirements

U.S. Place in the International Shipbuilding Market

The international shipbuilding market has apparently entered a more stable phase, with a brighter future at hand. Reductions in global shipbuilding capacity are bringing the industry more into alignment with demand. In fact, with the predictions for continued growth in the world economy and seaborne trade, concern has been expressed that there will not be enough shipbuilding capacity to meet the demand that is likely to occur within the coming decade.

Where does the United States shipbuilding industry fit in this picture? By 1997, given implementation of the Shipyard Recovery Program, the Shipbuilders Council estimates that the U.S. shipbuilding industry could capture three percent of the world's new tonnage requirement. The following table puts this estimate in perspective.

Actual & Projected Commercial Tonnage For U.S. Shipbuilders, Jan. 1 Each Year
(Deadweight Tons in Millions)

	U.S. Shipyards:		Total World:
Year	DWT	Percent	DWT
1977	4.2	5.2%	81.5
1982	.7	1.3%	52.6
1987	.1	.3%	31.8
1992	.5	1.1%	44.9
1997	2.1	3.0%	69.3

With series production, improved capital plant, and better work organization and processes, it is estimated that U.S. shipbuilding costs would not only be lower than West European costs but within striking distance of Japanese costs, assuming the yen does not depreciate substantially in relation to the dollar.

What is required for U.S. yards to realize competitive series production? Since foreign subsidies, coupled with destructive U.S. government policies, forced U.S. yards out of commercial work, the U.S. shipbuilding industry has concentrated on building "one of a kind" ships for the U.S. Navy. To become competitive in the commercial market with series ships, the industry would have to make some fundamental changes.

To make these changes, a three-way partnership is needed between the U.S. Government, the shipbuilders and shipyard workers as active participants. This is the focus of the U.S. Shipyard Recovery Program, which involves the creation by government of an interim assured market of sealift ships, the influx of capital investments and the implementation of technological and managerial improvements by the shipbuilders, and the cooperation and commitment of labor in order to achieve the goal of achieving competitiveness in the international market.

SHIPBUILDERS COUNCIL MEMBERS & STAFF

REGULAR MEMBERS

ADDSCO Industries, Inc
Mobile, AL

The American Ship Building Co.
Tampa Shipyards, Inc.
Tampa, FL

Atlantic Marine, Inc.
Jacksonville, FL

Avondale Industries, Inc.
New Orleans, LA

Bath Iron Works Corp.
Bath, ME

Bethlehem Steel Corp.
Bethlehem, PA

Capital Marine Corp.
Chester, PA

Continental Maritime
Industries, Inc.
San Francisco, CA

Edison Chouest Offshore, Inc.
North American Shipbuilding
Division
Galliano, LA

General Dynamics Corp.
St. Louis, MO

General Ship Corp.
East Boston, MA

Ingalls Shipbuilding, Inc.
Pascagoula, MS

Intermarine U.S.A.
Savannah, GA

Jacksonville Shipyards, Inc.
Jacksonville, FL

The Jonathan Corp.
Norfolk, VA

Marine Hydraulics
International, Inc.
Norfolk, VA

Marinette Marine Corp.
Marinette, WI

McDermott Corp.
New Orleans, LA

Metro Machine Corp.
Norfolk, VA

National Steel &
Shipbuilding Co.
San Diego, CA

Newport News Shipbuilding
Newport News, VA

Norfolk Shipbuilding &
Drydock Corp.
Norfolk, VA

Northwest Marine Iron Works
Portland, OR

Peterson Builders, Inc.
Sturgeon Bay, WI

Robert E. Derecktor of
Rhode Island, Inc.
Middletown, RI

Southwest Marine, Inc.
San Diego, CA

Textron Marine Systems
New Orleans, LA

Todd Shipyards Corp.
Seattle, WA

ALLIED INDUSTRIES MEMBERS

ALCOA/TRE
Santa Ana, CA

Bird-Johnson Co.
Walpole, MA

Centrico, Inc.
Northvale, NJ

Colt Industries, Inc.
Washington, DC

Combustion Engineering, Inc.
Windsor, CT

Dresser Pump Division
Dresser Industries, Inc.
Harrison, NJ

Eaton Corp.
Cutler-Hammer Products
Baltimore, MD

General Electric Co.
Washington, DC

Hopeman Brothers, Inc.
Waynesboro, VA

IMO Industries, Inc.
Lawrenceville, NJ

Jamestown Metal Marine Sales, Inc.
Boca Raton, FL

Jered Brown Brothers, Inc.
Troy, MI
Lake Shore, Inc.
Iron Mountain, MI

Raytheon Service Co.
Arlington, VA

SPD Technologies
Philadelphia, PA

Sperry Marine, Inc.
Charlottesville, VA

Westinghouse Electric Corp.
Sunnyvale, CA

York International Corp.
York, PA

AFFILIATE MEMBERS

The Bingham Group
Washinton, DC

Colton & Co.
Washington, DC

PacOrd, Inc.
National City, CA

Peterson & Co.
New York, NY

Poten & Partners, Inc.
New York, NY

Seacoast Electric Supply Corp.
Rye, NY

NAVAL ARCHITECT MEMBERS

JJH Inc.
Cherry Hill, NJ

John J. McMullen Associates, Inc.
New York, NY

M. Rosenblatt & Son, Inc.
New York, NY

ASSOCIATION MEMBERS

New York and New Jersey Dry Dock Association
Brooklyn, NY

South Tidewater Association of Ship Repairers, Inc.
Chesapeake, VA

STAFF

John J. Stocker
President

W. Patrick Morris
Vice President &
General Counsel

Silas O. Nunn
Vice President, Programs

Beverly C. Kendall
Secretary & Treasurer

Cynthia L. Brown
Director, Legislative Programs

William G. Kurfehs
Director, Ship Repair Programs

Carol Pardon
Assistant Director,
Legislative Programs